AMENDMENTS TO THE CLAIMS

The listing of claims below replaces all prior versions of claims in this application.

1. (Currently Amended) A positive-displacement vacuum pump comprising:

a pair of pump ~~rotor~~rotors rotatably disposed in a casing, said pump rotors being rotatable synchronously in opposite directions; and

a pump-rotor controller for controlling rotation of said pump ~~rotor in a forward direction or a reverse direction~~rotors in accordance with a predetermined pattern ~~at the time of starting~~when said vacuum pump is started, the predetermined pattern including a combination of at least two of rotation of said pump rotors in a forward direction, rotation of said pump rotors in a reverse direction, and stop of the rotation.

2. (Cancelled)

3. (Currently Amended) A positive-displacement vacuum pump according to ~~claim 2~~claim 1, wherein said predetermined pattern is set in said pump-rotor controller such that said pump ~~rotor is~~rotors are driven in the order of the rotation in said forward direction, the stop, and the rotation in said forward direction.

4. (Currently Amended) A positive-displacement vacuum pump according to ~~claim 2~~claim 1, wherein said predetermined pattern is set in said pump-rotor controller such that said pump ~~rotor is~~rotors are rotated in the order of said reverse direction and said forward direction.

5. (Currently Amended) A positive-displacement vacuum pump according to ~~any one of claims 1 to 4~~claim 1, further comprising:

a state-judging device for judging whether said pump ~~rotor is~~rotors are rotated normally or not ~~at the time of starting~~when said vacuum pump is started;

wherein when said state-judging device judges that said pump ~~rotor is~~rotors are not rotated normally at the time of starting said vacuum pump, said pump ~~rotor is~~ rotors are rotated in accordance with said predetermined pattern.

6. (Currently Amended) A method of starting a positive-displacement vacuum pump having a pair of pump ~~rotor~~ rotors rotatably disposed in a casing, said pump rotors being rotatable synchronously in opposite directions, said method, comprising:

controlling rotation of said pump ~~rotor in a forward direction or a reverse direction at the time of starting said vacuum pump~~ rotors in accordance with a predetermined pattern when said vacuum pump is started, the predetermined pattern including a combination of at least two of rotation of said pump rotors in a forward direction, rotation of said pump rotors in a reverse direction, and stop of the rotation; and

rotating said pump ~~rotor~~rotors in said forward direction in a steady state for evacuation.

7. (Cancelled)

8. (Currently Amended) A method of starting a positive-displacement vacuum pump according to ~~claim 7~~claim 6, wherein said predetermined pattern is set such that said pump ~~rotor is~~rotors are driven in the order of the rotation in said forward direction, the stop, and the rotation in said forward direction.

9. (Currently Amended) A method of starting a positive-displacement vacuum pump according to ~~claim 7~~claim 6, wherein said predetermined pattern is set such that said pump ~~rotor is~~rotors are rotated in the order of said reverse direction and said forward direction.

10. (Currently Amended) A method of starting a positive-displacement vacuum pump according to ~~any one of claims 6 to 9~~claim 6, further comprising:

judging whether said pump ~~rotor is~~rotors are rotated normally or not when said vacuum pump is started;

wherein said pump ~~rotor is~~ rotors are rotated in accordance with said predetermined pattern when said pump ~~rotor is~~rotors are judged not to be rotated normally.

11. (Currently Amended) A method of starting a positive-displacement vacuum pump having a pair of pump rotors rotatably disposed in a casing, said pump rotors being rotatable synchronously in opposite directions, said method comprising:

judging whether said pump ~~rotor is~~ rotors are rotated normally or not when said vacuum pump is started;

controlling rotation of said pump ~~rotor in a forward direction or a reverse direction at the time of starting said vacuum pump~~rotors in accordance with a predetermined pattern when said pump ~~rotor is~~rotors are judged not to be rotated normally, the predetermined pattern including a combination of at least two of rotation of said pump rotors in a forward direction, rotation of said pump rotors in a reverse direction, and stop of the rotation; and

rotating said pump ~~rotor~~ rotors in said forward direction in a steady state for evacuation.